Amendments to the Claims

Please amend the claims as follows:

Listing of Claims:

1. (Cancelled).

2. (Currently amended): A biological process for producing carotenoids including astaxanthin, the process comprising cultivating a microorganism which is capable of producing carotenoids which include ~~including~~ astaxanthin and belonging to the genus *Xanthophyllomyces (Phaffia)* in the presence of an inhibitor of biosynthesis of sterols from farnesyl pyrophosphate, a substrate for producing carotenoids which include ~~including~~ astaxanthin, in an aqueous nutrient medium under aerobic conditions wherein the concentration of the inhibitor in the aqueous medium is within a range that gives less than a 50 % reduction of cell growth as compared to cell growth in the absence of the inhibitor under carotenoids-producing conditions and cell growth is determined by measuring the optical density of a sample of the cultured medium at 660 nm, and isolating the resulting carotenoids which include ~~including~~ astaxanthin, from the cells of said microorganism or from the cultured medium ~~broth~~, wherein the astaxanthin content of the isolated carotenoids is greater than that which results from cultivating in the absence of an inhibitor of biosynthesis of sterols from farnesyl pyrophosphate.

3. (Currently amended): The process according to claim 2, wherein the microorganism is *Xanthophyllomyces dendrorhous* (*Phaffia rhodozyma*) ATCC96594, redeposited under accession No. ATCC 74438.

4 - 12. (Cancelled).

13. (Previously presented): The process according to claim 2, wherein the inhibitor of biosynthesis of sterols from farnesyl pyrophosphate is a squalene synthase inhibitor.

14. (Withdrawn): The process according to claim 13, wherein the squalene synthase inhibitor is selected from the group consisting of ammonium ion based squalene synthase inhibitors.

15. (Previously presented): The process according to claim 13, wherein the squalene synthase inhibitor is a phenoxypropylamine-type squalene synthase inhibitor.

16. (Previously presented): The process according to claim 15, wherein the phenoxypropylamine-type squalene synthase inhibitor is selected from the group consisting of [3-(3-allyl-biphenyl-4-yloxy)-propyl]-isopropyl-amine, N-isopropyl-3-(4-acetamido-2-allylphenoxy) propylamine, N-methyl-N-isopropyl-3-(4-acetamide-2-allylphenoxy) propylamine, N-cyclopentyl-3-(4-acetamido-2-allylphenoxy) propylamine, N-cyclobutyl-3-(4-acetamide-2-allylphenoxy) propylamine, N-isopropyl-3-(2-allyl-4-butyramidophenoxy) propylamine, N-isopropyl-3-(4-acetamido-2-chlorophenoxy) propylamine, N-isopropyl-3-(4-acetamido-2-propylphenoxy) propylamine, and N-isopropyl-3-(4-acetamido-2-allylphenoxy)-1-methylpropylamine, and biologically acceptable salts thereof.

17. (Previously presented): The process according to claim 16, wherein the phenoxypropylamine-type squalene synthase inhibitor is [3-(3-allyl-biphenyl-4-yloxy)-propyl]-isopropyl-amine, or a biologically acceptable salt thereof, N-isopropyl-3-

(4-acetamido-2-allylphenoxy) propylamine or N-methyl-N-isopropyl-3-(4-acetamide-2-allylphenoxy) propylamine.

18. (Cancelled).

19. (Currently amended): The process according to claim ~~18~~ 2, wherein the concentration of the inhibitor is within the range that gives less than 30 % reduction of the cell growth under carotenoids producing conditions.

20. (Previously presented): The process according to claim 2, wherein the cultivation is carried out at a pH in the range from 4 to 8 and at a temperature in the range from 15 to 26 °C, for 24 to 500 hours.

21. (Previously presented): The process according to claim 20, wherein the cultivation is carried out at a pH in the range from 5 to 7 and at a temperature in the range from 18 to 22 °C, for 48 to 350 hours.

22. (New): The process according to claim 3, wherein the inhibitor is [3-(3-allyl-biphenyl-4-yloxy)-propyl]-isopropyl-amine, or a biologically acceptable salt thereof, N-isopropyl-3-(4-acetamido-2-allylphenoxy) propylamine or N-methyl-N-isopropyl-3-(4-acetamide-2-allylphenoxy) propylamine.

23. (New): The process according to claim 2, wherein the optical density of a sample of the cultured medium in the presence of the inhibitor and of a sample of the cultured medium in the absence of the inhibitor collected on the second day of cultivation are measured, and the reduction of the cell growth is calculated as a percentage of the optical density of the sample in the presence of the inhibitor compared to the optical density of the sample in the absence of the inhibitor, to determine whether the concentration of the inhibitor is within a range that gives less

than a 50 % reduction of cell growth as compared to cell growth in the absence of the inhibitor.

24. (New) The process of claim 2 wherein

(i) the inhibitor is added to the cultured medium on the second day of cultivation; a sample of the cultured medium or the microorganism in the presence of inhibitor is collected, carotenoids are extracted from the sample of the cultured medium or the microorganism in the presence of inhibitor to provide isolated carotenoids which result from cultivating in the presence of the inhibitor, and astaxanthin content is determined for isolated carotenoids which result from cultivating in the presence of the inhibitor;

(ii) a sample of cultured medium or the microorganism on the second day of cultivation in the absence of inhibitor is collected, carotenoids are extracted from the sample of the cultured medium or the microorganism in the absence of inhibitor to provide isolated carotenoids which result from cultivating in the absence of the inhibitor, and astaxanthin content is determined for isolated carotenoids which result from cultivating in the absence of the inhibitor; and

(iii) the astaxanthin content of the isolated carotenoids in the presence of inhibitor is compared to that which results from cultivating in the absence of the inhibitor, to determine whether the astaxanthin content of the isolated carotenoids in the presence of inhibitor is greater than the astaxanthin content of the isolated carotenids in the absence of the inhibitor.